## ARRANGEMENT OF INTEGRATED CIRCUITS IN A MEMORY MODULE

## **Abstract of the Disclosure**

Integrated circuits utilizing standard commercial packaging are arranged on a printed circuit board to allow the production of 1-Gigabyte and 2-Gigabyte capacity memory modules. A first row of integrated circuits is oriented in an opposite orientation to a second row of integrated circuits. The integrated circuits in a first half of the first row and in the corresponding half of the second row are connected via a signal trace to a first register. The integrated circuits in a second half of the first row and in the corresponding half of the second row are connected to a second register. Each register processes a non-contiguous subset of the bits in each data word.

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